

COSMOPOLITAN CHRONICLE

True tales from the annals of history, archaeology, construction, and restoration of the Casa de Bandini and Cosmopolitan Hotel.
Old Town San Diego State Historic Park

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Bathrooms : Part III

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When the Casa de Bandini was completed in 1829, the toilet as we know it today was still decades away from being invented. His family had two options; chamber pot, and outhouse. In 1869, when the Cosmopolitan opened the guests still had the same two options.



Chamber Pot



Outhouse

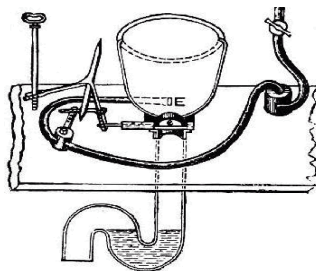
The most complex fixture in modern bathrooms is the toilet. The history of how they came into being is long.

King Minos (circa 1500 B.C.) ruler of Crete, had a toilet, that flushed with

water. So did the ancient Greeks and Egyptians, followed by the Romans. These were pretty basic, a seat located over a channel of water that flowed or was piped to the nearest river. In China, a flushing toilet has been discovered from the Western Han Dynasty (206 BC to 24 AD). Although they worked, these systems all had drawbacks, for example, they were all at ground level.

Leonardo DaVinci had plans for flushing water closets for the castle of Francis I at Ambrose. The plans included flushing channels inside the walls, and a ventilating system which reached through the roof. They were never built, as the project was considered nonsense.

Sir John Harrington, godson to Queen Elizabeth I, is often credited with inventing the first flushing water closet in 1596. However, only 2 were ever made. An American design was patented in 1857, but proved to be unsanitary. The first English patent for the flushing water closet--made mostly of copper--was issued to watchmaker Alexander Cummings, in 1775 incorporating an S-curve in the drain, called a P-trap, to keep sewer gases from coming out. It also had its problems, primarily it still let sewer gas leak into the home between the bowl and the floor, and it had no venting.



Cummings design

Many attempts were made to correct this, and the problem was solved by a plumber named Thomas Crapper, who invented an airtight seal--a wax ring--between the bowl and the floor. He also invented the chain pull mechanism, and venting system that went through the roof, similar to DaVinci's scrapped design. Crapper teamed up with Thomas Twyford, a pottery maker, whose design allowed some water to remain in the bowl, and the ceramic bowl became standard. Twyford also made toilets into art pieces, by molding them into many shapes including dolphins.



Although by 1873, 43 British firms, including Twyford, were exporting high-quality closets to the U.S., these toilets did not gain popularity until the return of soldiers from England after WWI. American designs were still behind, but finally caught up about 1900, when most new home designs included indoor plumbing.

